

CONTENTS.

PART 1.

	Page.
ORGANIZATION AND SESSIONAL BUSINESS.....	I
INTERNATIONAL REGULATIONS OF THE FISHERIES ON THE HIGH SEAS. By O. T. Olsen. With discussion.....	77
INTERNATIONAL REGULATIONS OF THE FISHERIES ON THE HIGH SEAS. By Charles Edward Fryer.....	91
INTERNATIONAL REGULATIONS OF THE FISHERIES ON THE HIGH SEAS. By Charles Hugh Stevenson. With discussion.....	103
WORK OF THE INTERNATIONAL FISHERIES COMMISSION OF GREAT BRITAIN AND THE UNITED STATES. By David Starr Jordan.....	181
SOME REASONS FOR FAILURE OF FISH PROTECTIVE LEGISLATION AND SOME SUGGESTED REMEDIES. By Oregon Milton Dennis.....	187
NATIONAL ASPECTS OF ANGLING AND THE PROTECTION OF GAME FISHES. By H. Wheeler Perce.....	193
SPORT FISHING IN CALIFORNIA AND FLORIDA. By Charles F. Holder.....	199
LOBSTERS AND THE LOBSTER PROBLEM IN MASSACHUSETTS. By George W. Field. With discussion.....	209
A METHOD OF LOBSTER CULTURE. By A. D. Mead.....	219
SEA MUSSELS AND DOGFISH AS FOOD. By Irving A. Field. With discussion.....	241
THE WHOLESOMENESS OF OYSTERS AS FOOD. By Henry C. Rowe.....	259
EFFECTS OF MENHADEN FISHING UPON THE SUPPLY OF MENHADEN AND OF THE FISHES THAT PREY UPON THEM. By Walter E. Hathaway. With discussion.....	269
EFFECTS OF THE MENHADEN AND MACKEREL FISHERIES UPON THE FISH SUPPLY. By W. C. Kendall.....	279
AN IMPROVED AND PRACTICAL METHOD OF PACKING FISH FOR TRANSPORTATION. By A. Sölling.....	295
A PROCESS FOR PRESERVING THE PEARL-OYSTER FISHERIES AND FOR INCREASING THE VALUE OF THE YIELD OF PEARLS. By John I. Solomon.....	303
FUR SEALS AND THE SEAL FISHERIES. By Charles H. Townsend.....	315
ECONOMIC CONDITIONS OF THE FISHERIES IN ITALY. By Guido Rossati.....	323
THE FISHERIES AND THE GUANO INDUSTRY OF PERU. By Robert E. Coker.....	333
THE FISHERIES OF CHINA. By Wei-Ching W. Yen.....	367
THE FISHERIES OF JAPAN CONSIDERED FROM A GEOGRAPHICAL STANDPOINT. By T. Kitahara....	375
GOLDFISH AND THEIR CULTURE IN JAPAN. By Shinnosuke Matsubara.....	381
✓ COMMERCIAL SPONGES AND THE SPONGE FISHERIES. By H. F. Moore.....	399
THE ABUSE OF THE SCAPHANDER IN THE SPONGE FISHERIES. By Ch. Flégel.....	513
A PRACTICAL METHOD OF SPONGE CULTURE. By H. F. Moore.....	545
SPONGE CULTURE. By Jules Cotte.....	587
EXPERIMENTS IN THE ARTIFICIAL PROPAGATION OF FRESH-WATER MUSSELS. By George Lefevre and W. C. Curtis.....	615
A PLAN FOR PROMOTING THE WHITEFISH PRODUCTION OF THE GREAT LAKES. By S. W. Downing.....	627
A PLAN FOR PROMOTING THE WHITEFISH PRODUCTION OF THE GREAT LAKES. By Frank N. Clark.....	635
A PLAN FOR PROMOTING THE WHITEFISH PRODUCTION OF THE GREAT LAKES. By Paul Reighard.....	643
Discussion of whitefish question.....	685

PART 2.

FISH-CULTURAL PRACTICES IN THE BUREAU OF FISHERIES. By John W. Titcomb.....	697
A NEW PRINCIPLE OF AQUICULTURE AND TRANSPORTATION OF LIVE FISHES. By A. D. Mead.....	759
A METHOD OF CULTIVATING RAINBOW TROUT AND OTHER SALMONIDÆ. By Charles L. Paige....	781
POSSIBLE EXPANSION OF SHAD-HATCHERY WORK. By S. G. Worth.....	789
THE COMPARATIVE VALUE OF FOODS FOR RAINBOW TROUT AND OTHER SALMONOIDS. By Charles L. Paige.....	795
APPARATUS AND METHODS EMPLOYED AT THE MARINE FISH HATCHERY AT FLØDEVIG, NORWAY. By G. M. Dannevig.....	799
THE UTILITY OF SEA-FISH HATCHING. By G. M. Dannevig.....	811

	Page.
PROPAGATION AND PROTECTION OF THE RHINE SALMON. By P. P. C. Hoek.....	817
FISHES IN THEIR RELATION TO THE MOSQUITO PROBLEM. By William P. Seal.....	831
FOODS FOR YOUNG SALMONOID FISHES. By Charles G. Atkins.....	839
FRESH-WATER SHRIMP, A NATURAL FISH FOOD. By S. G. Worth.....	853
THE CULTIVATION OF THE TURBOT. By R. Anthony.....	859
THE TREATMENT OF FISH-CULTURAL WATERS FOR THE REMOVAL OF ALGÆ. By M. C. Marsh and R. K. Robinson.....	871
NOTES ON THE DISSOLVED CONTENT OF WATER IN ITS EFFECT UPON FISHES. By M. C. Marsh...	891
CAUSES OF DISEASE IN YOUNG SALMONIDS. By Eugene Vincent.....	907
RADICAL PREVENTION OF COSTIA NECATRIX IN SALMONOID FRY. By Johann Franke.....	917
TREATMENT OF FUNGUS ON FISHES IN CAPTIVITY. By L. B. Spencer.....	929
METHODS OF COMBATING FUNGUS ON FISHES IN CAPTIVITY. By Charles F. Holder.....	933
A NEW METHOD OF COMBATING FUNGUS ON FISHES IN CAPTIVITY. By Paul Zirzow.....	937
EIGHTEEN MONTHS' EXPERIENCE WITH A DISEASE OF BROOK TROUT. By Albert Rosenberg...	941
AMERICAN FISHES IN ITALY. By Giuseppe Besana.....	947
ACCLIMATIZATION OF AMERICAN FISHES IN ARGENTINA. By E. A. Tulian.....	955
THE INTRODUCTION OF AMERICAN FISHES INTO NEW ZEALAND. By L. F. Ayson. With dis- cussion.....	967
NATURALIZATION OF AMERICAN FISHES IN AUSTRIAN WATERS. By Franz von Pirko.....	977
CAUSES OF DEGENERATION OF AMERICAN TROUTS IN AUSTRIA. By Johann Franke.....	983
NEW AND IMPROVED DEVICES FOR FISH CULTURISTS. By Alfred E. Fuller.....	991
A DEVICE FOR COUNTING YOUNG FISH. By Robert K. Robinson.....	1001
A METHOD OF TRANSPORTING LIVE FISHES. By Charles F. Holder.....	1005
A METHOD OF MEASURING FISH EGGS. By H. von Bayer.....	1009
AN IMPROVEMENT IN HATCHING AND REARING BOXES; WITH NOTES ON CONTINUOUS FEEDING OF THE FRY OF SALMONIDÆ. By G. E. Simms.....	1015
DEVICES FOR USE IN FISH HATCHERIES AND AQUARIA. By Eugene Vincent.....	1025
NEW METHODS OF TRANSPORTING EGGS AND FISH. By W. S. Kincaid.....	1037
FISHWAYS. By H. von Bayer.....	1041
A PLEA FOR OBSERVATION OF THE HABITS OF FISHES AND AGAINST UNDUE GENERALIZATION. By Theodore Gill. With discussion.....	1059
THE HABITS AND LIFE HISTORY OF THE TOADFISH (OPSANUS TAU). By E. W. Gudger.....	1071
METHODS OF STUDYING THE HABITS OF FISHES AND RECORDING THEIR LIFE HISTORIES; WITH AN ACCOUNT OF THE BREEDING HABITS OF THE HORNED DACE. By Jacob Reighard.....	1111
A METHOD OF OBSERVING THE HABITS AND RECORDING THE LIFE HISTORIES OF FISHES. By Charles F. Holder.....	1137
EFFECTS OF CHANGES IN THE DENSITY OF WATER UPON THE BLOOD OF FISHES. By George G. Scott.	1143
INTERNAL PARASITES OF THE SEBAGO SALMON. By Henry B. Ward.....	1151
NOTES ON THE FLESH PARASITES OF MARINE FOOD FISHES. By Edwin Linton.....	1195
STRUCTURE AND FUNCTIONS OF THE EAR OF THE SQUETEAGUE. By G. H. Parker.....	1211
AN INTENSIVE STUDY OF THE FAUNA AND FLORA OF A RESTRICTED AREA OF SEA BOTTOM. By Francis B. Sumner.....	1225
DEVELOPMENT OF SPONGES FROM TISSUE CELLS OUTSIDE THE BODY OF THE PARENT. By H. V. Wilson.....	1265
GASES DISSOLVED IN THE WATERS OF WISCONSIN LAKES. By E. A. Birge. With discussion..	1273
VOLUMETRIC STUDIES OF THE FOOD AND FEEDING OF OYSTERS. By H. F. Moore.....	1295
A PLAN FOR AN EDUCATIONAL EXHIBIT OF FISHES. By Charles F. Holder.....	1309
A PLAN FOR AN EDUCATIONAL EXHIBIT OF FISHES. By Roy W. Miner.....	1315
OUTLINE FOR AN EDUCATIONAL EXHIBIT OF FISHES. By F. A. Lucas.....	1341
A METHOD OF PREPARING FISH FOR MUSEUM AND EXHIBITION PURPOSES. By Dwight Franklin.	1353
NEW METHODS OF PREPARING FISHES FOR MUSEUM EXHIBIT. By J. D. Figgins.....	1357
THE UNITED STATES BUREAU OF FISHERIES: ITS ESTABLISHMENT, FUNCTIONS, ORGANIZATION, RESOURCES, OPERATIONS, AND ACHIEVEMENTS. By Hugh M. Smith.....	1365
GENERAL INDEX.....	I-XII